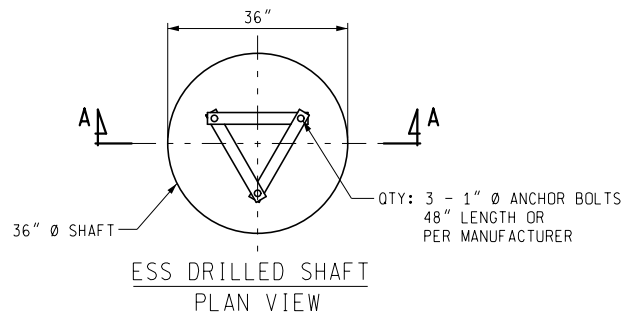
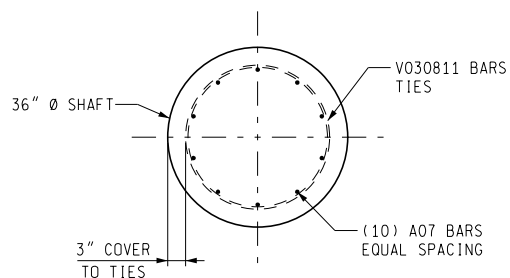


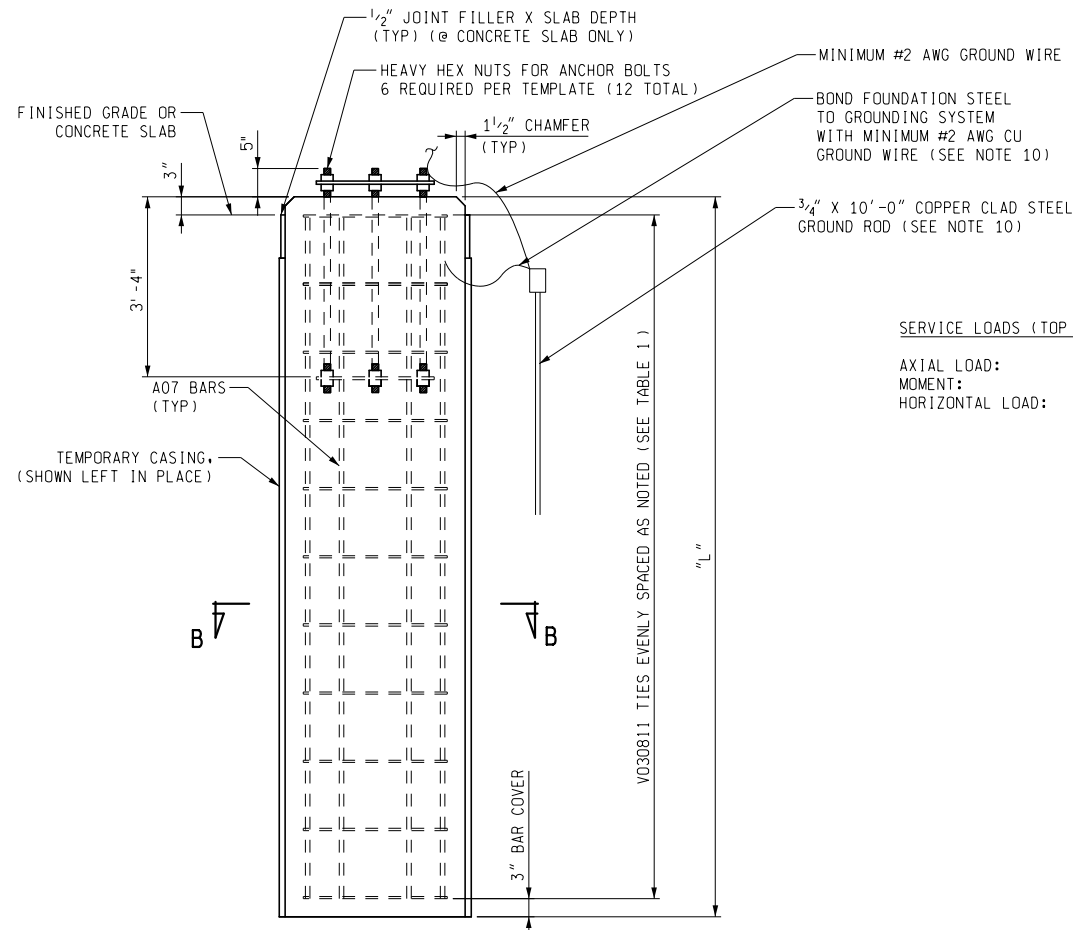
ANCHOR BOLT DETAIL
PARTIAL ELEVATION
CONDUITS NOT SHOWN IN THIS VIEW FOR CLARITY.



ESS DRILLED SHAFT
PLAN VIEW



ESS DRILLED SHAFT
SECTION B-B

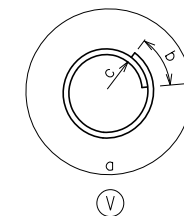
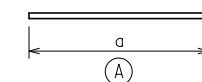


ESS DRILLED SHAFT
SECTION A-A
CONDUIT NOT SHOWN FOR CLARITY

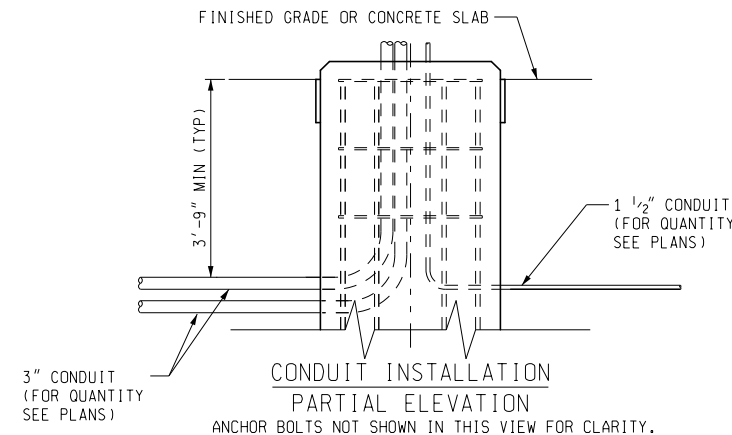
SERVICE LOADS (TOP OF FOUNDATION):
AXIAL LOAD: 0.78 KIPS
MOMENT: 20.3 KIP-FT
HORIZONTAL LOAD: 1.08 KIPS

BAR SIZE: A064700
BAR LENGTH (FT):
BAR LENGTH (IN):
BAR SHAPE:

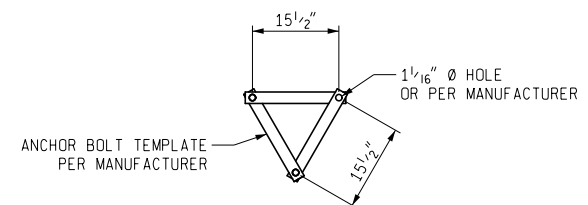
BAR LEGEND



DRILLED SHAFT LENGTH	
FES LOCATION	L



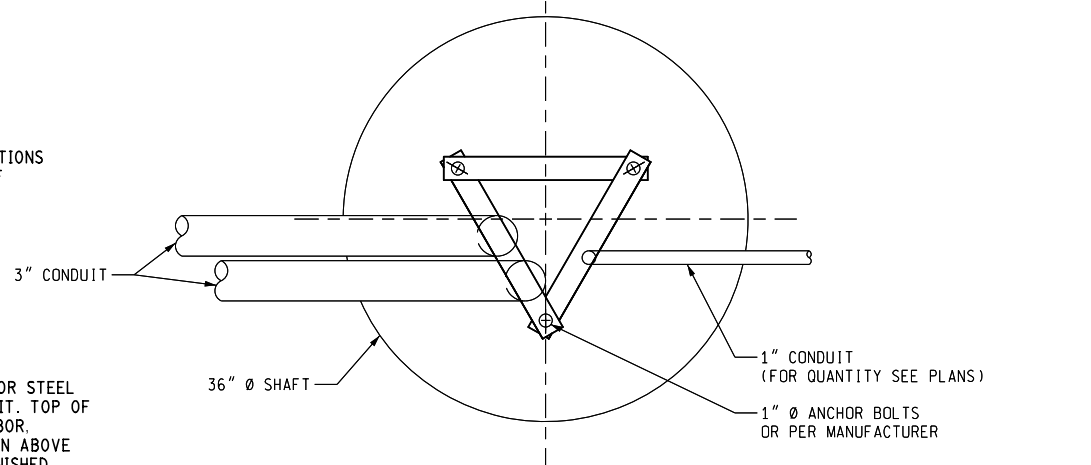
CONDUIT INSTALLATION
PARTIAL ELEVATION
ANCHOR BOLTS NOT SHOWN IN THIS VIEW FOR CLARITY.



ANCHOR BOLT TEMPLATE DETAIL
PLAN VIEW (2 REQ'D PER FOUNDATION)
NOTE: ALL DIMENSIONS TYPICAL

- NOTES:**
- ALL MATERIALS & CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.
 - CONTRACTOR MUST TAKE APPROPRIATE PRECAUTIONS TO PREVENT DAMAGING EXISTING STRUCTURES AND UTILITIES. ANY DAMAGE TO EXISTING STRUCTURES OR UTILITIES MUST BE REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER, INCLUDING ENGINEERING ANALYSIS AND REDESIGN, AND WITHOUT ANY EXTENSION OF THE COMPLETION DATES FOR THE PROJECT.
 - ALL DISTURBED AREAS SHALL BE RESTORED IN ACCORDANCE WITH THE SPECIAL PROVISION FOR, "Slope Restoration, TYPE A". CONTRACTOR IS TO MINIMIZE THE AREAS OF DISTURBANCE AS MUCH AS IT IS PRACTICAL.
 - CONCRETE MUST BE PROTECTED FROM FLOWING WATER AND DAMAGE FROM MECHANICAL EQUIPMENT AND NEARBY CONSTRUCTION VIBRATIONS. VIBRATIONS FROM CONSTRUCTION OPERATIONS (VIBRATORY CASING INSTALLATIONS, CONCRETE DEMOLITION, ETC.) WILL NOT BE PERMITTED WITHIN A RADIUS OF 25 FEET UNTIL THE CONCRETE HAS ATTAINED 75 PERCENT OF ITS SPECIFIED MINIMUM STRENGTH.
 - CONCRETE MUST BE PROTECTED FROM STRENGTH REDUCTION CAUSED BY HEAT, FROST OR FREEZING ACTIONS PER SECTION 706.03 OF THE STANDARD SPECIFICATIONS.
 - FINAL CONDUIT LOCATIONS AND HARDWARE INSTALLATION CONFIGURATION PLANS, INCLUDING WIRING CIRCUIT SCHEMATICS, TO BE SUBMITTED IN CONTRACTOR'S DRILLED SHAFT INSTALLATION PLANS FOR APPROVAL BY THE ENGINEER.
 - CONDUIT MUST BE AS SPECIFIED IN SECTION 819 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.
 - SEE PLANS FOR TOP OF SHAFT ELEVATION. IN ORDER FOR CONDUIT TO ENTER FOUNDATION, CONTRACTOR MAY CUT HOLES IN THE STEEL CASING OR STEEL CASING MAY STOP AT THE CONDUIT ENTRANCE TO FOUNDATION. CUT HOLES MUST BE LOCATED, CUT AND FINISHED SO AS NOT TO DAMAGE CONDUIT. TOP OF FOUNDATION MUST BE FORMED SEPARATELY IF THE STEEL CASING STOPS AT THE CONDUIT ENTRANCE TO THE FOUNDATION. THE COST OF ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO CUT HOLES IN THE STEEL CASING OR FORM, POUR, FINISH AND CURE THE PORTION OF THE FOUNDATION ABOVE THE CASING SHALL BE INCLUDED IN THE BID ITEM "Drilled Shaft, 30 inch". AT CONTRACTOR'S OPTION, THE CASING MAY STOP 1'-0" BELOW FINISHED GRADE ELEVATIONS.
 - COBBLES, BOULDERS OR RIPRAP MUST NOT BE CLASSIFIED AS OBSTRUCTIONS.
 - ALL GROUNDING WORK INCLUDING MATERIALS AND LABOR SHALL BE PAID FOR IN ACCORDANCE WITH THE SPECIAL PROVISION FOR "GROUNDING, BONDING, LIGHTNING PROTECTION AND SURGE PROTECTION FOR ITS EQUIPMENT".

- REINFORCEMENT BAR & ANCHOR BOLT NOTES:**
- REINFORCEMENT BARS FOR FOUNDATION SHALL BE GRADE 60 DEFORMED BARS AS SPECIFIED IN SECTION 905.03 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.
 - CONTRACTOR SHALL VERIFY ANCHOR BOLT PATTERN PRIOR TO FABRICATION OF ANCHOR BOLTS AND TEMPLATES.
 - ANCHOR BOLTS ARE TO BE VERTICAL & POSITIONED AS SHOWN IN PLAN.
 - TEMPLATE PLATES & ANCHOR BOLT CAGE SHALL BE SHOP FABRICATED, ASSEMBLED, AND APPROVED BY MDOT PRIOR TO SHIPPING.
 - DIAMETER OF BOLT HOLES IN TEMPLATES SHALL BE 1/16" LARGER THAN ANCHOR BOLT DIAMETER.
 - INSTALL AND TIGHTEN BOLTS/NUTS ACCORDING TO SUBSECTION 810.03N OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION, EXCEPT ADDITIONAL ONE-THIRD TURN AFTER SNUG CONDITION IS NOT REQUIRED.
 - THE TEMPLATES SHALL BE WELL SUPPORTED, HORIZONTALLY LEVEL & FIRMLY ANCHORED IN PLACE FOR A MINIMUM OF 24 HOURS AFTER THE CONCRETE PLACEMENT IS COMPLETED.
 - DUE CARE SHALL BE TAKEN DURING THE CONCRETE PLACEMENT TO AVOID DISPLACING THE ANCHOR BOLTS.
 - NO HAMMERING ON OR CUTTING OF THE ANCHOR BOLTS OR TEMPLATES WILL BE ALLOWED. NO CHISELING OR DAMAGING OF GALVANIZED FINISH WILL BE PERMITTED.
 - AFTER TOP TEMPLATE IS REMOVED, THREAD NUTS ON TO THE BOLT FLUSH WITH THE BOLT END TO PROTECT THREADS UNTIL FRAME IS ERECTED.



CONDUIT INSTALLATION PLAN

REINFORCEMENT STEEL NOT SHOWN FOR CLARITY

FINAL ROW PLAN REVISIONS (SUBMITTAL DATE:)			
NO.	DATE	AUTH	DESCRIPTION



NO SCALE

PRINT DATE: 11/1/2016	DATE:
FILE: ESS Tower Fnd- 11-1-2016 ITS053A	DESIGN UNIT:
	TSC:

CS:
JN:

TOWER FOUNDATION

DRAWING SHEET

SHEET 1 OF 1